

# 59<sup>th</sup> Medical Wing

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**U.S. AIR FORCE**

## WHMC/BAMC Ophthalmology Step 3 Product Line Analysis

Information Brief

Briefers: COL Grimes/Col  
Flynn

& LtCol Julian

Date: 14 December 2004

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***Integrity - Service - Excellence***

# Ophthalmology Overview

- Clinic Description
- GME Discussion
- Comparison of Data
- Areas of Possible Collaboration
- Requirements

# Ophthalmology

## Clinic Descriptions

	WHMC	BAMC
<b>Major Differences in Programs</b>	All subspecialty areas represented, Refractive Surgery Center, Level III Nursery ROP, only AF Residency program	Critical subspecialty shortage; recent loss of staff Bum unit; 1 of 3 Army programs...sole DoD combined
<b>Specialty Coverage</b>	All traditional subs (oculoplastics, glaucoma, cornea, peds, neuro, retina) + Ocular Oncology, Uveitis, Refractive Surgery except Pathology	Glaucoma, Cornea, Neuro; Ref Surgery; Ocular Pathology- missing peds, retina, uveitis, oculoplastics
<b># Authorized Staff MDs</b>	10	6(FY 06=7)
<b># of Currently Assigned Staff MDs</b>	9	6
<b># Projected Assigned MDs (Summer 05)</b>	8.5	7(2 staff may seperate?)
<b>OR Starts</b>	4/week currently 7/week (FY04 level)	3/week currently; varied 2-4/wk over last 6mon



# Ophthalmology GME

- Integrated BAMC/WHMC since 1997
- Associated with UTHSCSA
- 36 Month Residency PGY2-4
- 15 Total Residents:
  - 5 per year: 2 Army/3 AF
  - Increase to 6/year (2007) 2 Army / 4 AF
  - Rotate between MTFs



# Ophthalmology GME

- FY04 Overall Program Health: Excellent
  - 100% Board Certification / 100% on time graduation
  - Board Scores: top 1-5% nation-wide x 5 yrs
  - Research: Pubs/presentations: 65/ past 12 months



# Ophthalmology GME

- RRC: Last accreditation Jan 2003
  - Maximum accreditation with exemplary citations
    - Next accreditation due Jan 2008
- Potential Problem Areas:
  - OR Starts – case mix/volume
  - Staffing Shortfalls
    - Technician / Admin Support

# Ophthalmology

## Mobility and Other Deployments

	<b>Air Force</b>	<b>Army</b>
<b>FY03</b>	2 each for 3 months / 4 HCA	3 each for 7 months / 2 HCA
<b>FY04</b>	2 each for 2 weeks / 4 HCA	3 each for 5 months / 2 HCA
<b>FY05</b>	1 for 4 months / 5 HCA	1 HCA

# Comparison of Data



# Ophthalmology

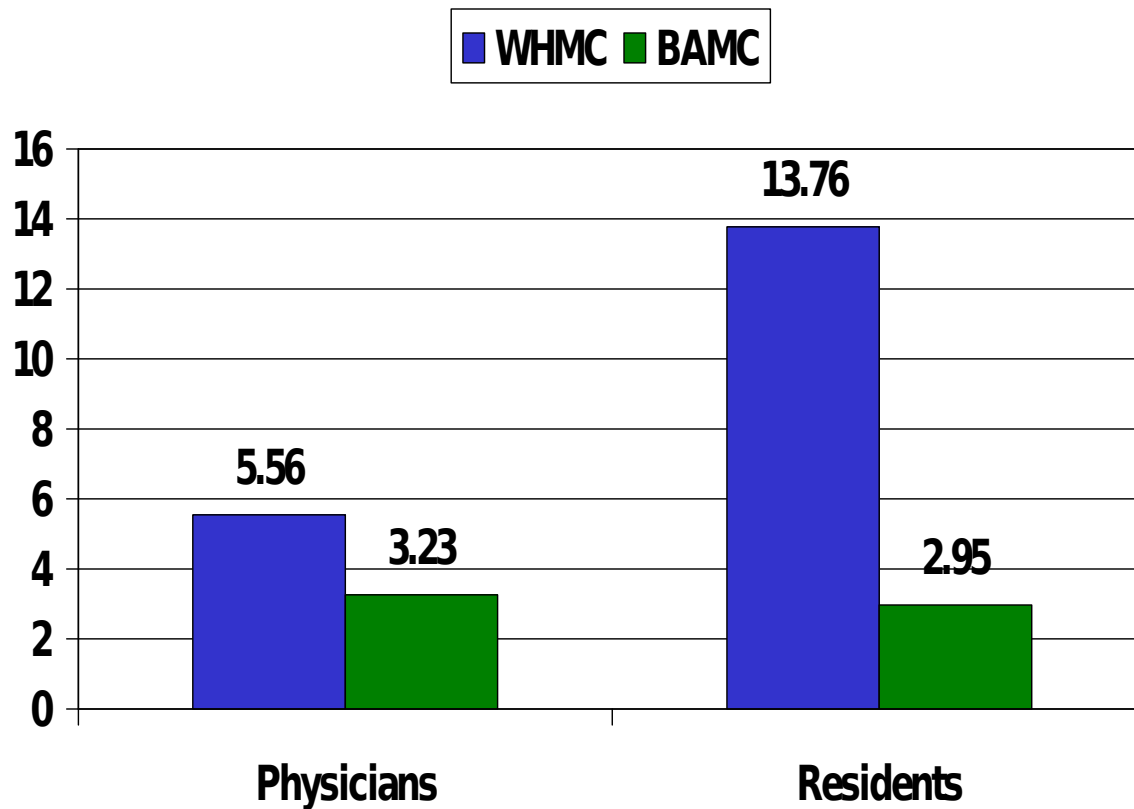
## Access to Care

	Standard	WHMC	BAMC
Access to Care for Specialty Appt	28 Days	15.2 Days	15.04 Days

- Meeting Access Std

# Ophthalmology

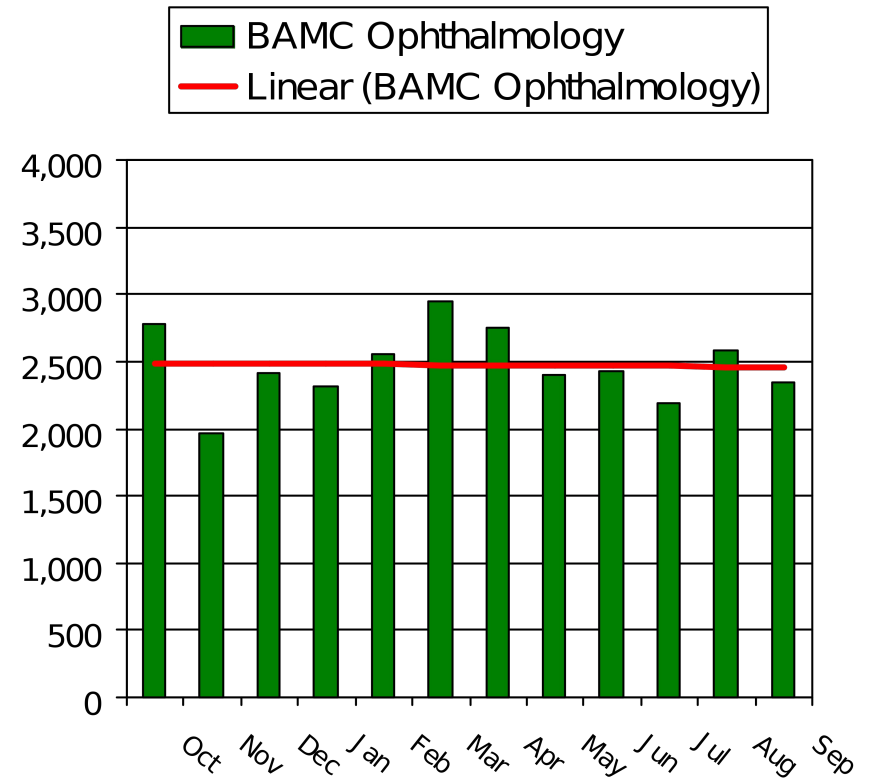
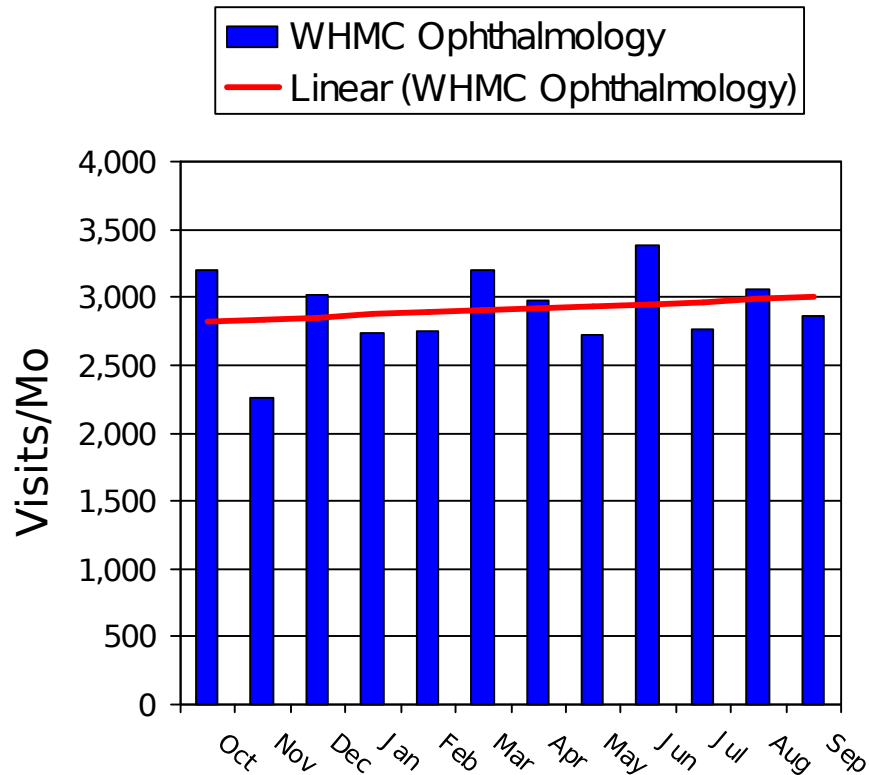
## FY04 Avg Available FTEs



- FY04 Assigned MDs
  - WHMC: 8
  - BAMC: 5

# Ophthalmology

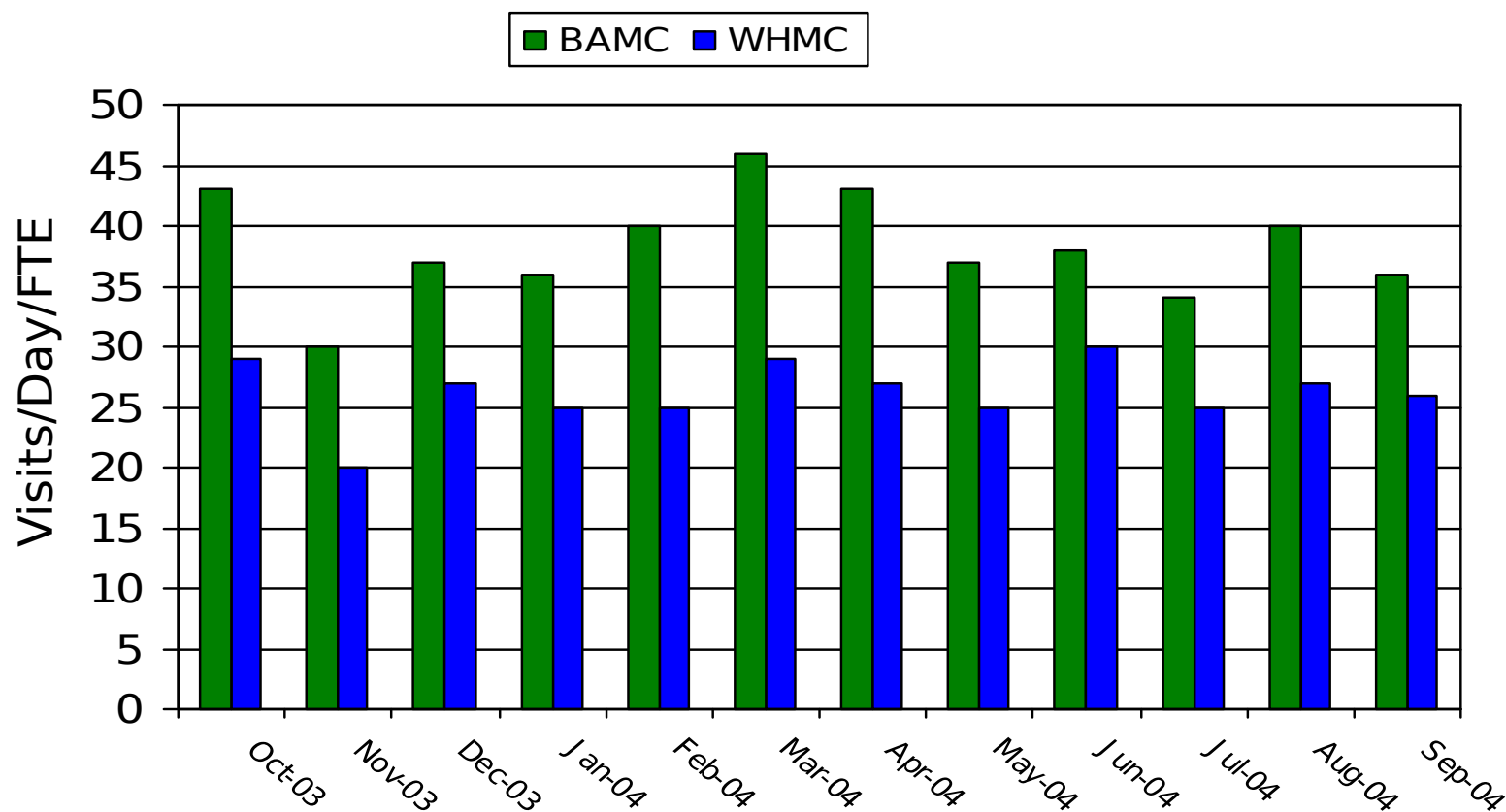
## Total FY04 Visits



- WHMC Avg: 2,911/mo
- BAMC Avg: 2,475/mo

# Ophthalmology

## FY04 OP Visits/FTE/Day\*

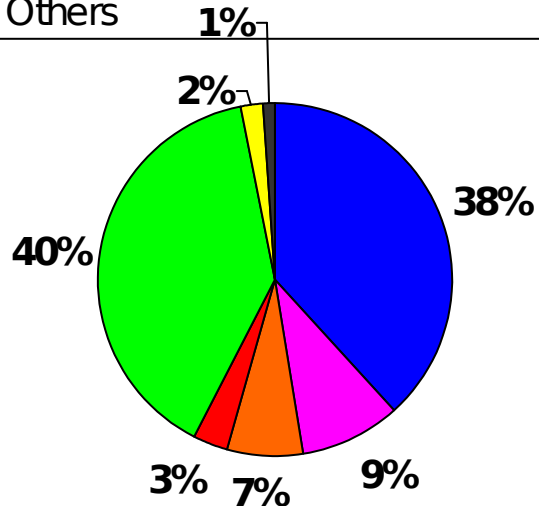
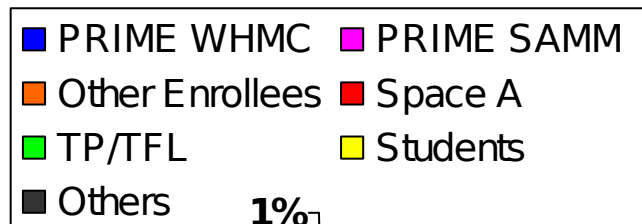


\* Total Visits divided by "MEPRS Avail Type I" @ 20 days/mo

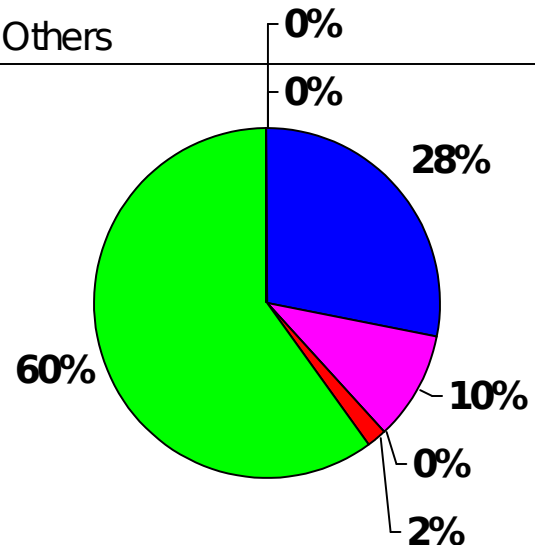
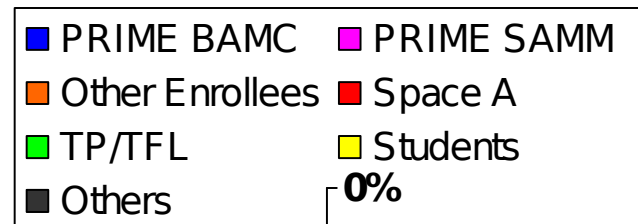
- BAMC Avg:  
38/day
- WHMC Avg:  
26/day

# Ophthalmology

## Source of RVUs



WHMC

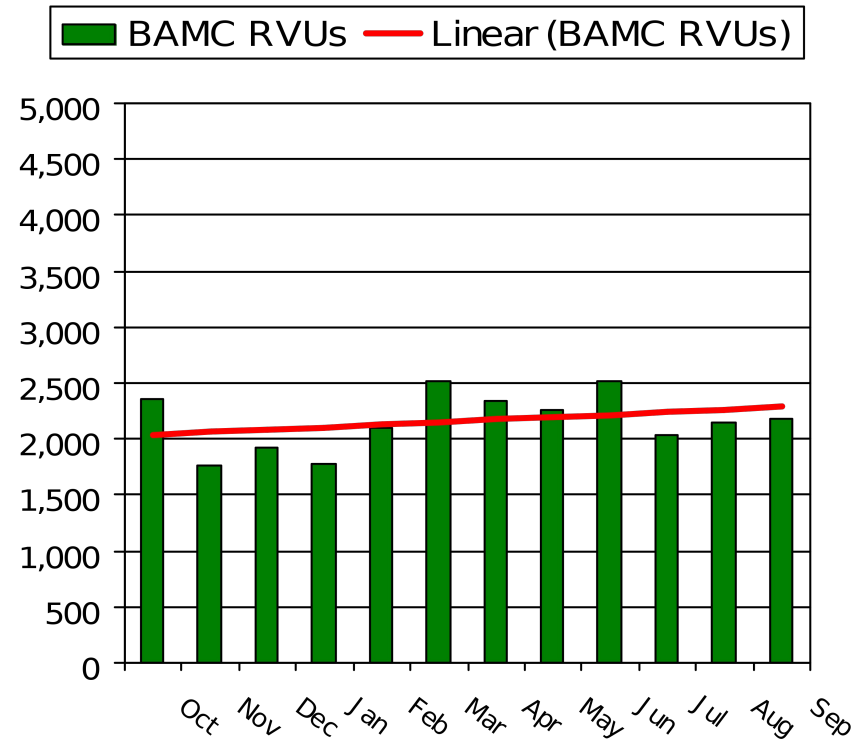
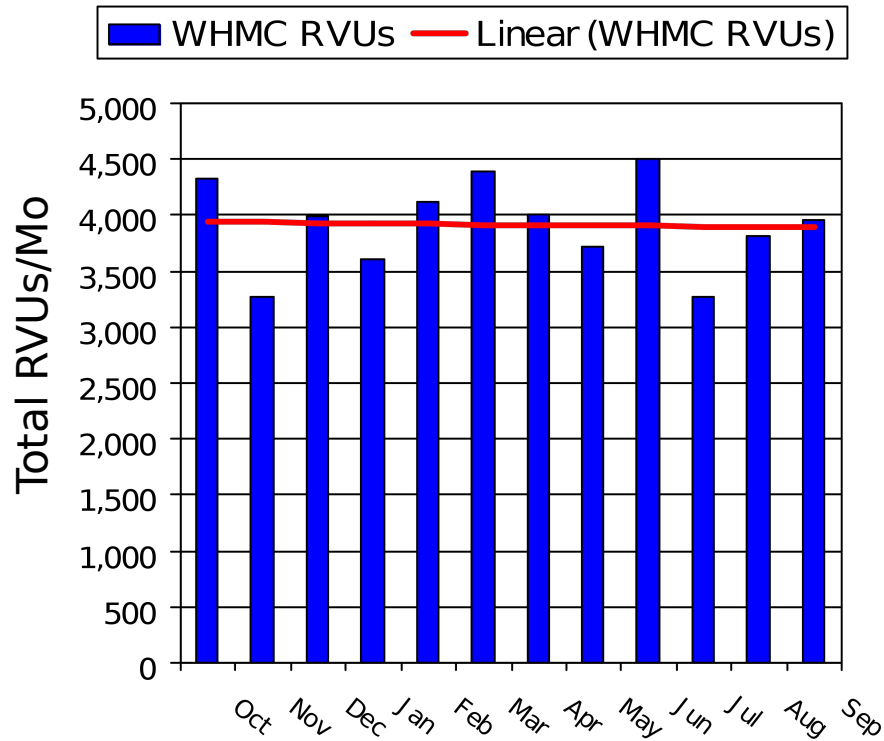


BAMC

- More than half of BAMC's RVUs are generated by >65 Beneficiaries

# Ophthalmology

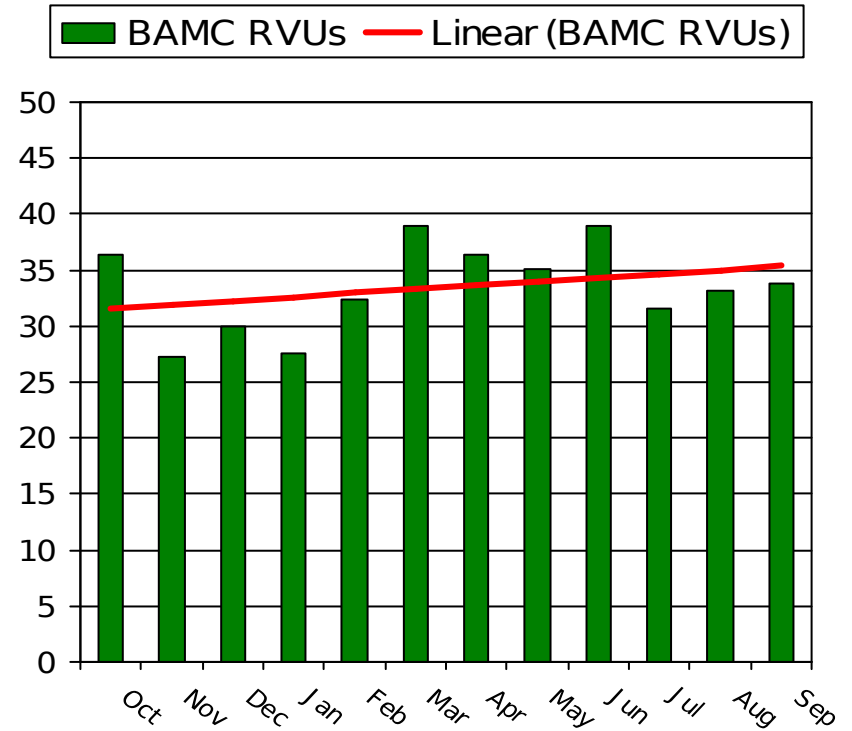
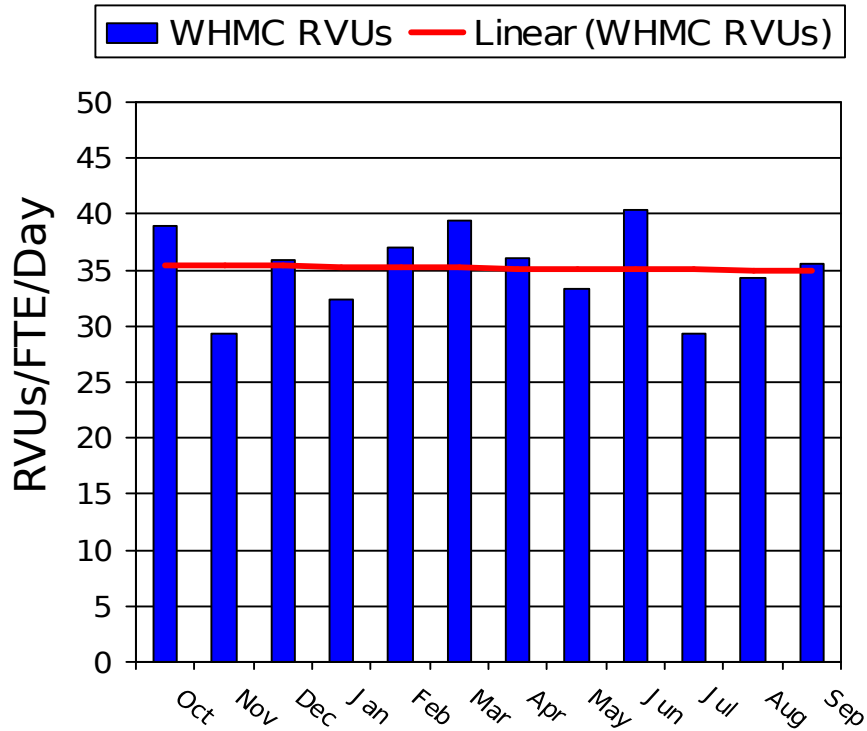
## Total RVUs FY04



- WHMC Avg: 3,914/mo
- BAMC Avg: 2,161/mo

# Ophthalmology

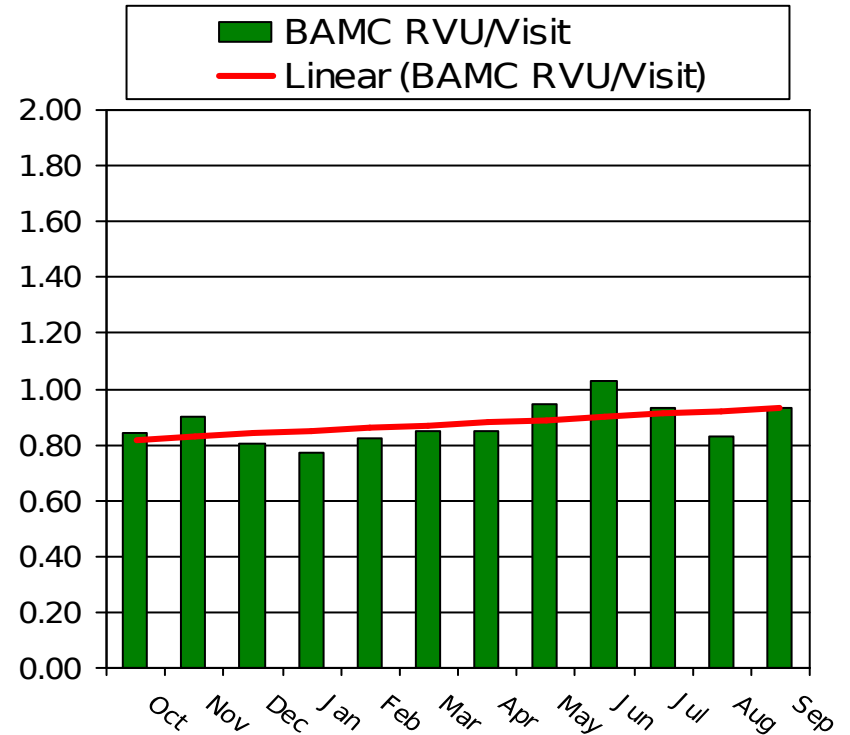
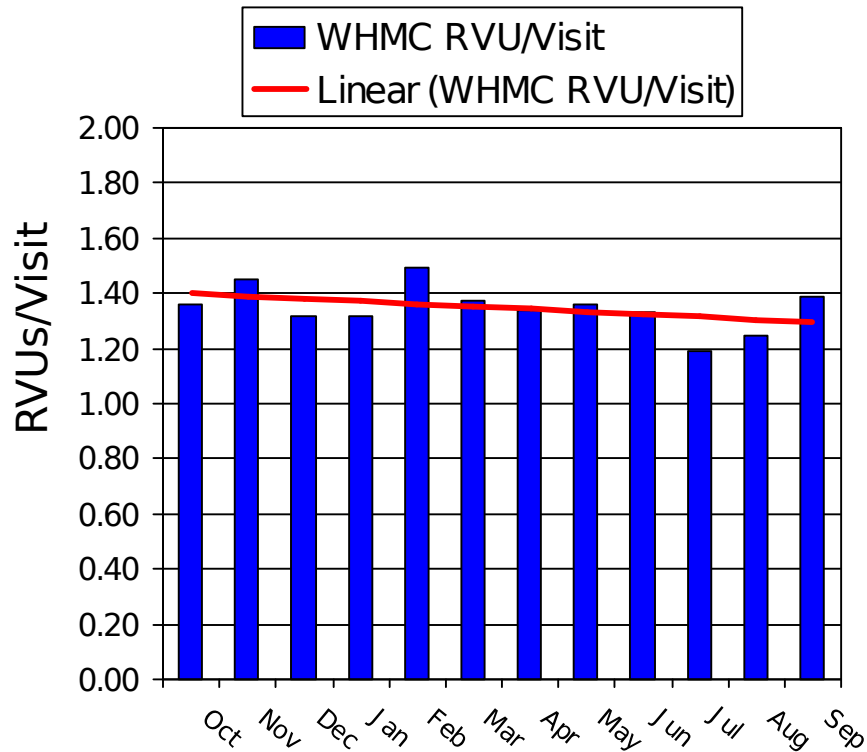
## Total RVUs/FTE/Day FY04



- WHMC Avg: 35.2 RVUs/FTE/day
- BAMC Avg: 33.5 RVUs/FTE/day

# Ophthalmology

## Total RVUs/Visit FY04

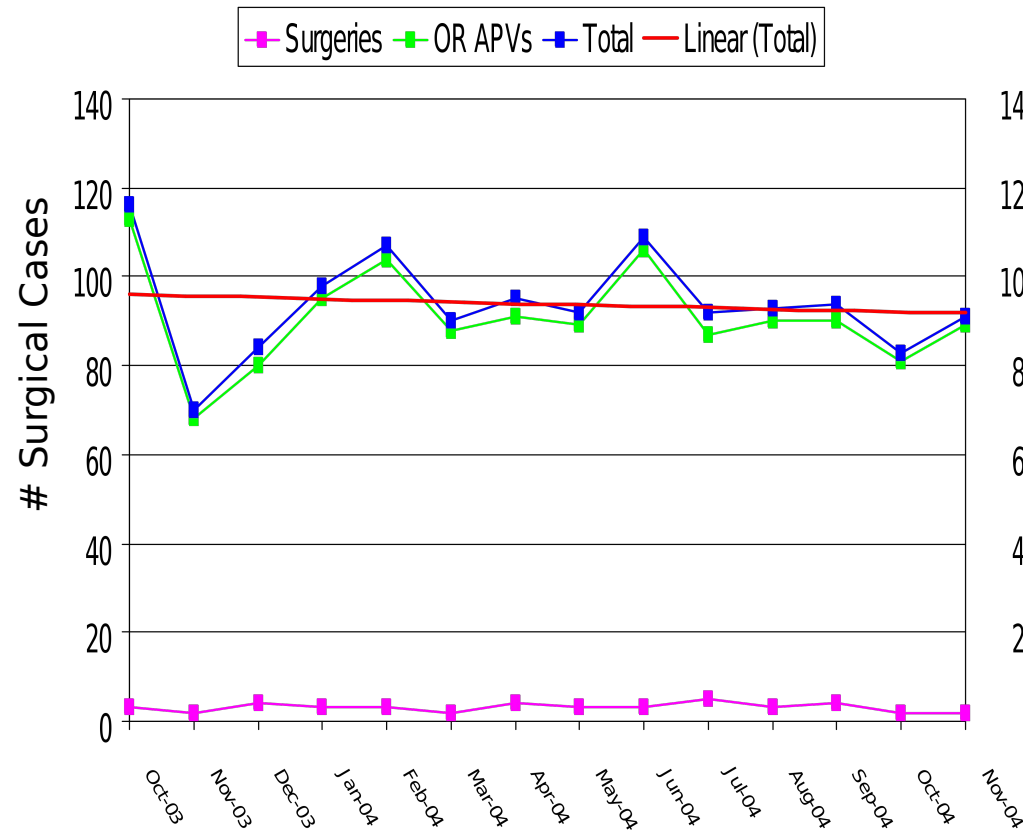


- WHMC Avg: 1.35 RVUs/Visit
- BAMC Avg: 0.88 RVUs/Visit
- Academic Avg: 1.84 RVUs/visit

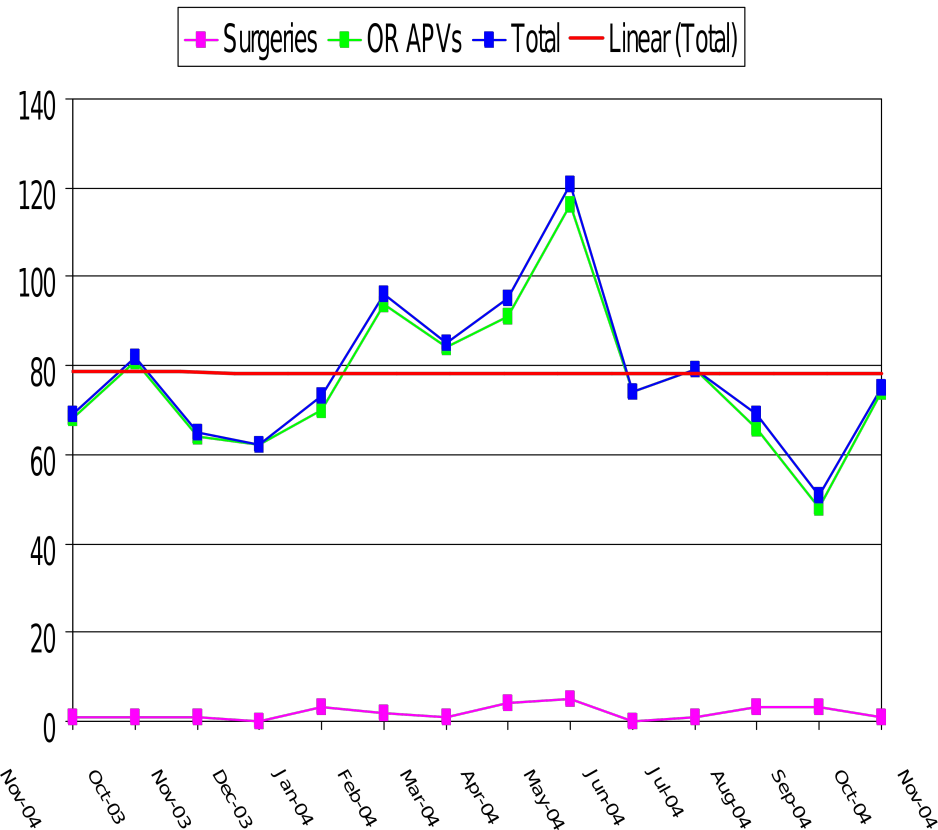


# Ophthalmology

## Surgeries and OR/APVs FY04



WHMC

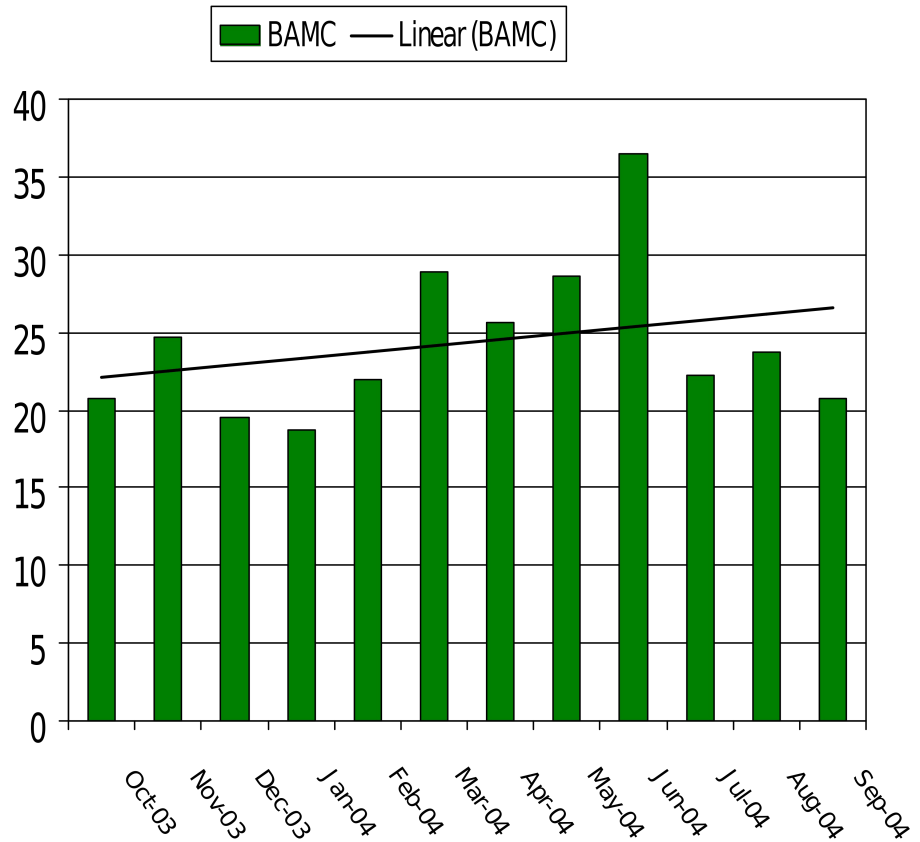
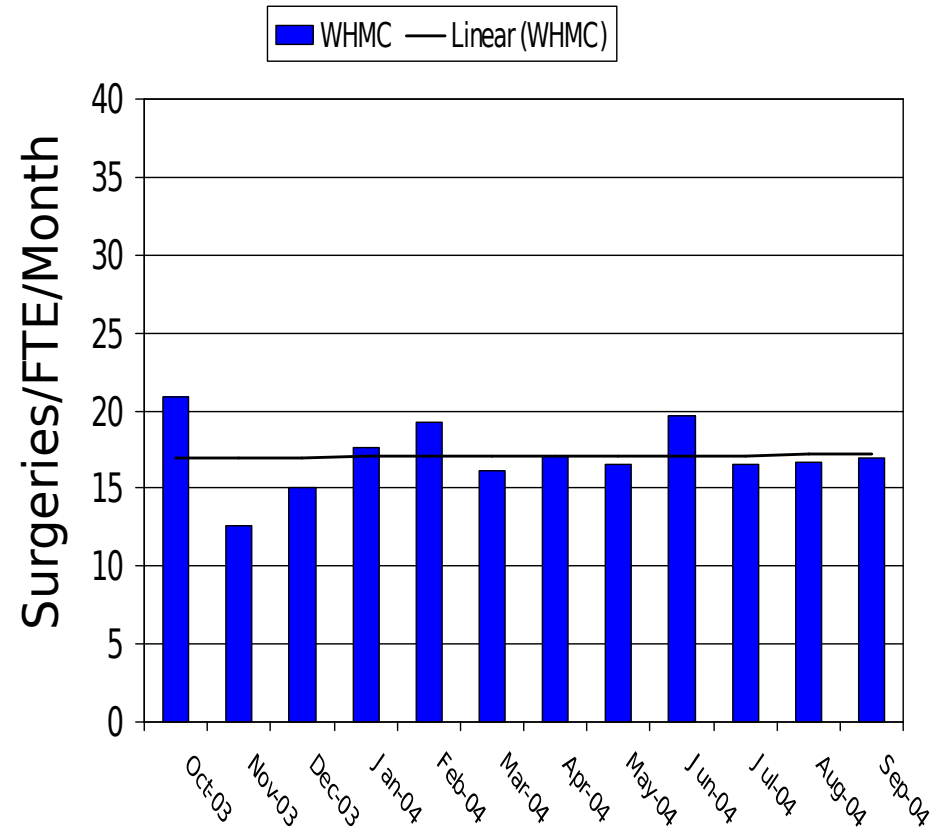


BAMC

- OR/APVs: ~97% of OR cases
- FY04 WHMC Avg: 95/mo
- FY04 BAMC Avg: 81/mo

# Ophthalmology

## FY04 Surgeries/FTE/Mo

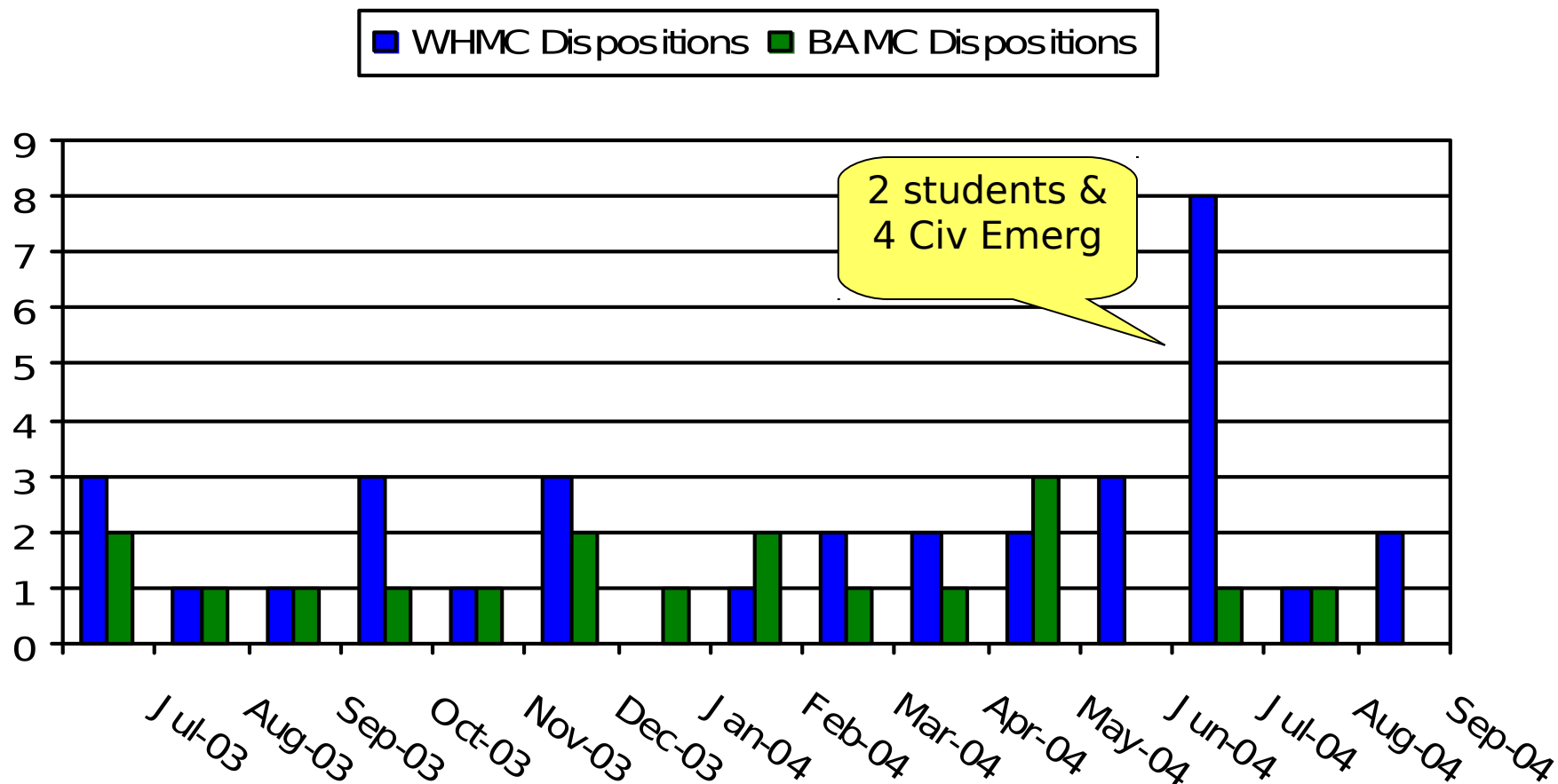


BAMC Avg: 1.2/FTE/Day  
WHMC Avg: 0.9/FTE/Day

\* Total Visits divided by "MEPRS Avail Type I" @ 20 days/mo

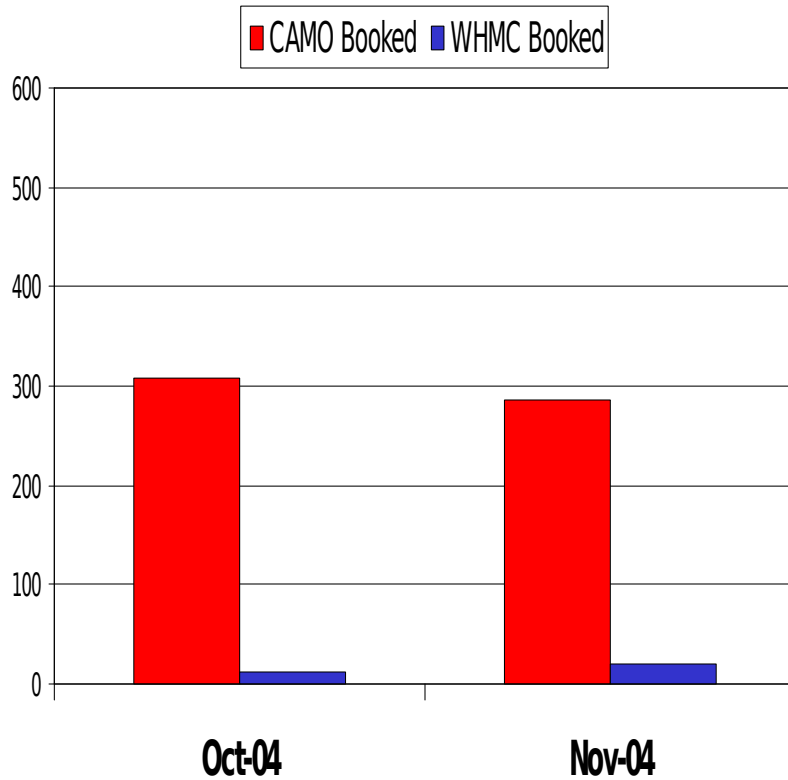
# Ophthalmology

## Total Dispositions Jul 03 - Sep 04 (15 mo)

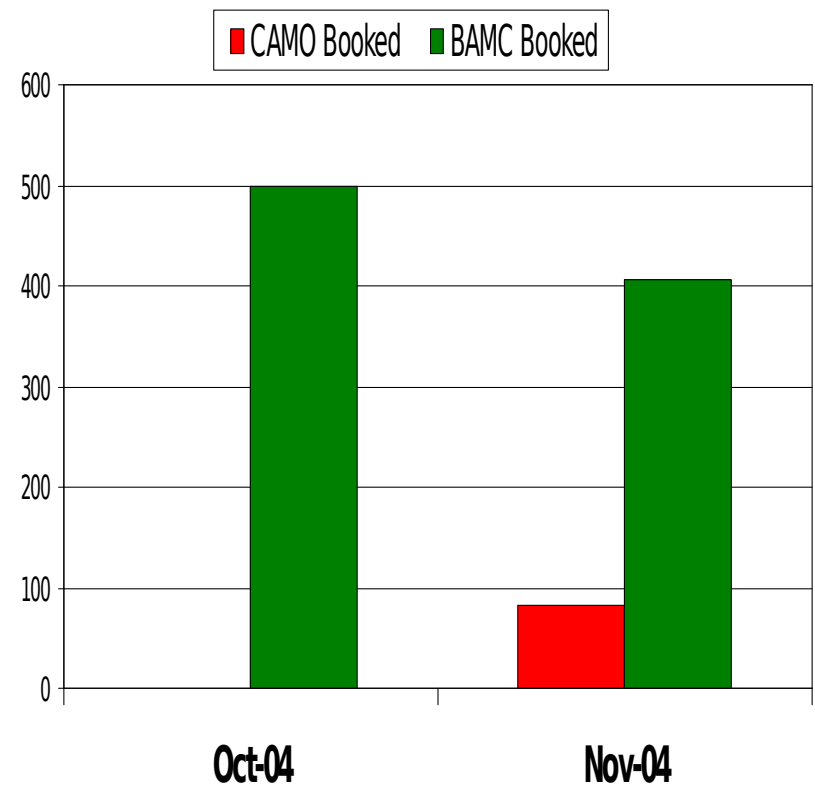


- WHMC: 2/mo (39% Civ Emerg; 29% trainees)
  - LOS: 3.6 days; RWP/Disp: 0.75
- BAMC: 1/mo (29% Civ Emerg; 29% Other Enrollees/OIF)
  - LOS: 2.2 days; RWP/Disp: 0.68

# Ophthalmology Consults and CAMO Booking



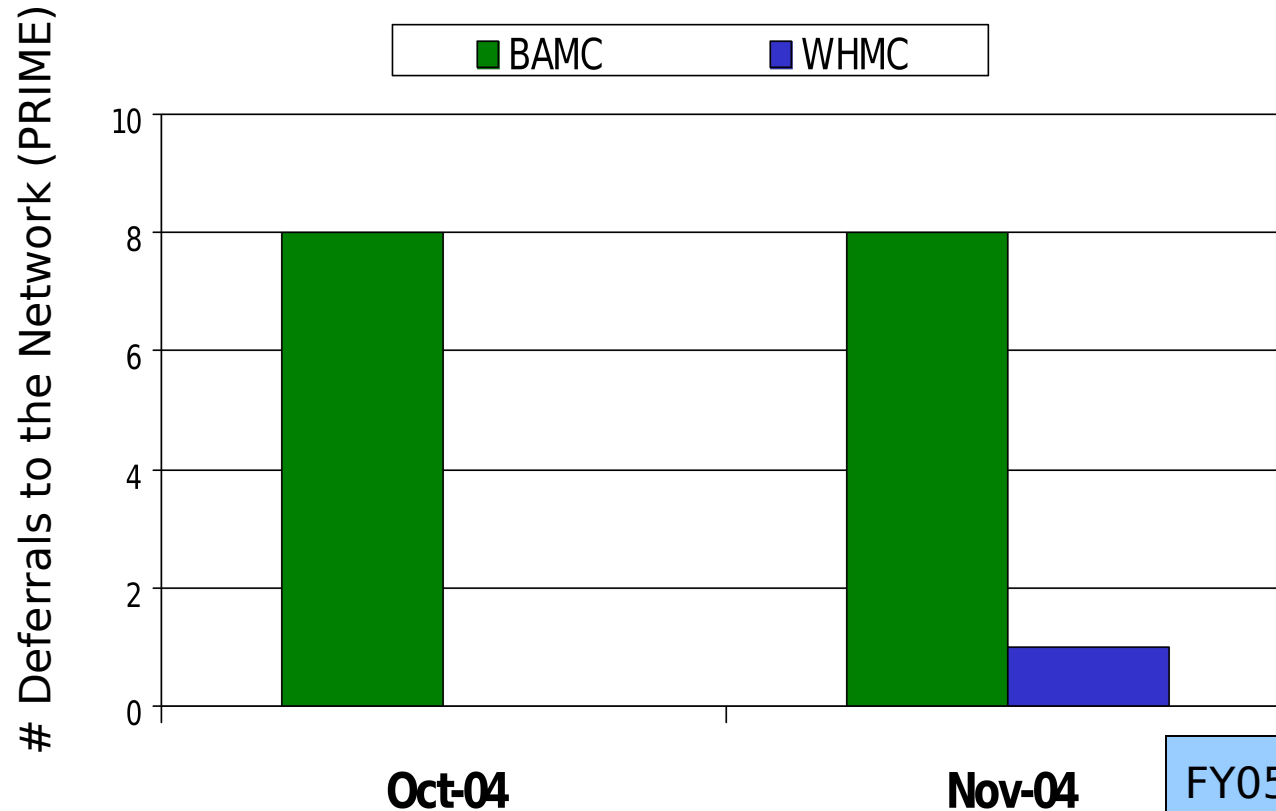
WHMC



BAMC

- Total Consults/Mo: 806
  - 39% to WHMC; 61% to BAMC
- CAMO Booking:
  - WHMC: 95% of consults
  - BAMC: 9% of consults

# Ophthalmology Deferrals to Network



FY05 Totals:

- BAMC: 16
- WHMC: 1

# Ophthalmology Market Share

- In FY04, WHMC and BAMC had a **95%** market share (outpatient) for beneficiaries under age 65
- Direct Care CMAC:
  - BAMC: \$1.626M
  - WHMC: \$3.126M

- Outpatient claims are down 52% compared to FY03

Category	FY03 Total	FY04 (>95%)
AD	\$ 5,401	\$ 2,272
BAMC PRIME	\$ 21,429	\$ 10,796
WHMC PRIME	\$ 27,460	\$ 9,282
Other MTFs	\$ 12,108	\$ 10,106
Network PRIME	\$ 41,545	\$ 23,176
Tricare Standard	\$ 67,833	\$ 29,261
Total	\$ 175,776	\$ 84,893

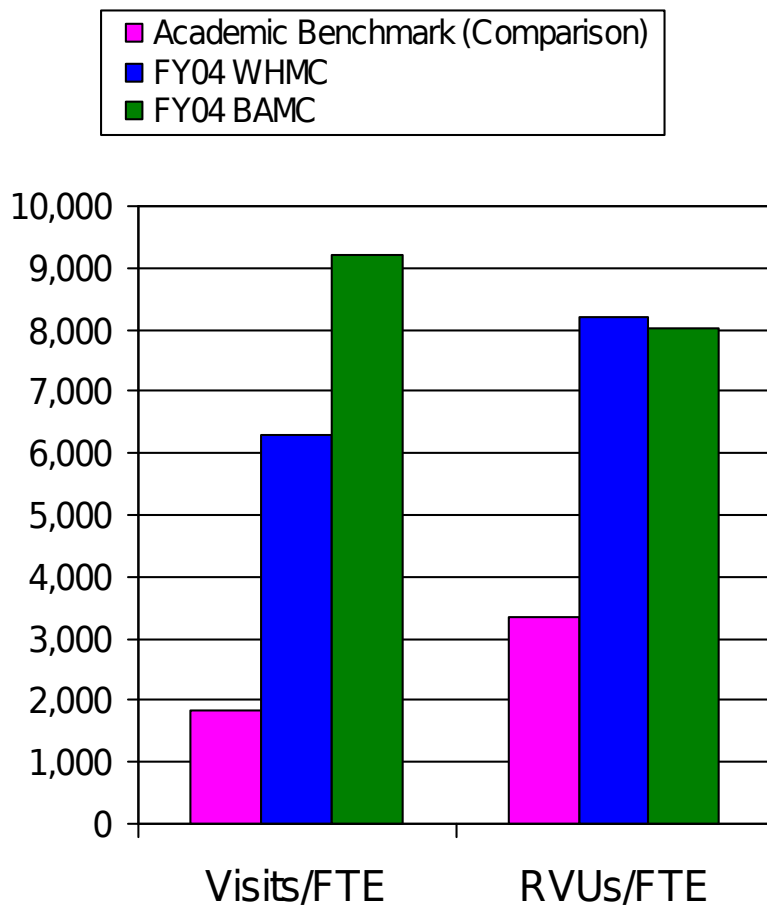
*CMAC: Champus Maximum Allowable Charge*

# Ophthalmology Coding Analysis

	<b>Air Force</b>	<b>Army</b>
<b>ICD9</b>	87.6%	93.5%
<b>CPT</b>	83.5%	100%
<b>E&amp;M</b>	80.5%	100%

# Ophthalmology

## Benchmark Comparison per FTE



	WHMC	BAMC
#FTEs	5.60	3.23
FY04 Visits	35,228	29,695
FY04 Visits/FTE	<b>6,291</b>	<b>9,193</b>
<b>Academic Benchmark (visits/FTE)</b>	<b>1,817</b>	<b>1,817</b>
% Compared to Acad. Benchmark	346%	506%
FY04 RVUs	45,973	25,937
RVU/Visit	1.31	0.87
RVU/FTE	<b>8,209</b>	<b>8,030</b>
<b>Academic Benchmark (RVI/FTE)</b>	<b>3,337</b>	<b>3,337</b>
% Compared to Acad. Benchmark	246%	241%

- Academic average is 1.84 RVUs/visit



# Possible Collaboration and Requirements



# Ophthalmology Collaboration



- Ocular Pathology – BAMC ophthalmologist
  - GME training at UT by BAMC ophthalmologist
- Peds & Strabismus subspecialty - reciprocation
  - WHMC Peds Subspec travels to BAMC for peds
  - BAMC General Ophthalmologist travels to WHMC for equal number of TP patients
- Retina/Uveitis
  - WHMC specialists cover both hospitals
  - 80-100 patients/month seen at BAMC
- Oculoplastics
  - WHMC specialist covers both hospitals



# Telemedicine Collaboration



- Connection from BAMC to WHMC
  - Send Fluorescein Angiograms to WHMC for interpretation
- Request CC support for Systems set up
  - Similar to DAMC to BAMC connection
  - Situation: Attempts made to facilitate such a connection appear to be thwarted due to priority at IMD
  - Recommendations: **Command influence in facilitating higher priority in IMD**



# Warfighter Refractive Surgery Expansion Project

- AF/Army Combined Center
  - Expansion to the WHMC Wellness Center
    - (provides an additional 10K to existing 6K sqft)
  - Will utilize AF/Army SG Funding
  - 2 additional lasers (1 Excimer and 1 femtosecond)
  - AF/Army will share laser time and resources
  - Anticipate a doubling of productivity (2000 to 4000 tx's)
  - Potential for increased collaborative research efforts

# Surgical Volume

- Surgical Case Mix and Volume: FY04 – Good
  - Mid 1/3 nation-wide (30-60%tile)
  - 2/3 from > 65 (requires 25-30 visits/surgery)
- FY04 Starts
  - WHMC 7/week...8 is optimum balance
    - Currently 4/week
  - BAMC 2 - 4/week...5 is optimum balance
    - Currently 2-3/ week
- Recommendation
  - Increase to **4.5 Main OR days** at BAMC
  - Develop Minor OR to increase complexity of surgeries
    - Equipment: microscope, monitoring equip
    - Personnel: share ENT nurse anesth.





# Surgical Volume

- BAMC approved MOU with Methodist
  - Tested successfully
  - Methodist prohibits residents as 1<sup>o</sup> surgeons
- Civilian ASU initiative by WHMC
  - Sites identified – residents as 1<sup>o</sup> okay
  - Approval process - under study
  - Not cost neutral, = Cost Savings
    - Supply cost alone >\$120K/ year savings



# WHMC Ophthalmology Prime

- RSA cuts = Loss of 1 FTE MD/ 2 techs / 1 clerk  
= 300 TP patients/month
- Clinic threshold for TP disengagement
  - Despite losses of MD and support - none yet
    - Due to less OR time (MD & techs seeing patients instead of surgery)
    - Reciprocity with BAMC
    - Admin/GME time diverted to clinic time
  - Disengagements looming?
    - Insufficient ancillary support to sustain
    - Soon will have a shortage of MD's



# WHMC Ophthalmology Prime

- \* *Step 2; approved restoration of 0.5 MD/ 1 tech /1 admin*
- Awaiting restoration of CC approved staff
- Need active duty 4AO's to fill three vacant authorizations and one pending deployment
- Future goals
  - Looking for funding sources for additional tech/clerk support (not yet = SCO)
  - Clinic nurse





# Ophthalmology

## Manpower-Support Staff

### BAMC

- **Provide a dedicated MSC Admin officer** (dedicated to Ophth only)
- Convert current **contract RN to GS** for continuity in management and supervisory requirements
- Replace current NCOIC (after tour ends) with a **dedicated full-time comparable GS** position.
- **Convert military to GS positions** to increase availability from .5 to 1.0 per position(5 slots)
- Increase civilian tech support from **8.5 to 11.5** to accommodate increase efficiency in high volume clinics, provide surgeon admin support(Oplog, CHCS II)



# Manpower-Support Staff Background

Experience of Leadership at officer manager level over last 4 years has included:

- Lack of consistency(8 NCOIC's)
- Lack of experience (problems with interactions especially felt with older employees, professional staff, working with union, retention issues; latest NCOIC has been only one of 8 to be experienced and assigned for over 18 mo in position)
- Lack of Service control of NCOIC due to commitments outside clinic (duty, deployments, trng, career)



# Ophthalmology Manpower

- Part-time Retina Contract Doc\*
  - **Already developed**
  - Consider option to expand when WHMC goes to 1 Retina(Feb/March 05)
- Contract Physician(s)
  - Ideal scenario:
    - Several part-time docs (difficult to get quality full-time due to short notice, security of position) up to 1.0 FTE
    - Get part-time docs with subspecialty coverage in shortage areas(example oculoplastics, peds if workload too much for current staff)
    - \*See “background” slides for status of subspecialty coverage
  - **Already being addressed**



# Staff Providers

## Background

- 8 subspecialty areas required(oculoplastics, retina, peds, glaucoma, cornea, refractive surgery, neuro-oph, pathology)
  - for GME support
  - for tertiary care to GPRMC
- BAMC lacks 3 subspecialty coverages for GME; 2 for Trauma



# Staff Providers-**Retina**

## *Background*

- Optimally covered by 1.5 retina docs per medcen
  - Due to trauma mission
  - Constant Call for emergencies
- BAMC now has .25
  - Contract Doc coming on-board, 1 day/wk
- WHMC now has 2.25
  - 2 full-time (one doc .25 availability for non-surgical interventions)
  - Early Spring 05: 1.25 docs retire
- Shortage for WHMC/BAMC: .50-1.75



# Staff Providers- **Oculoplastics**

## *Background*

- Optimally covered by 1.0 plastics docs per medcen
  - Due to trauma mission
  - Constant Call for emergencies
- WHMC now has .50
  - Current doc is PD for SAUCHEC, AAO Examiner
- Shortage for WHMC/BAMC: 1.50



# Staff Providers-**Peds**

## *Background*

- Optimally covered by 1.0 peds docs per medcen
  - Due to support of large young Air Force population
  - BAMC support of Ft Hood
  - Tertiary support for region
  - Trauma mission
  - Constant call for emergencies inherent in subspecialty mix
- WHMC now has 1.0 Peds Coverage
  - 1 doc is also covers neuro-oph, is Air Force Ophth consultant
  - 1 doc covers anterior segment and has executive duties
- Shortage for combined program: 1.0



# Staff Providers-Glaucoma

## Background

- Marginally covered
- Optimally covered by 1.0 Glaucoma docs per medcen
  - Due to large patient population, GME
  - Tertiary support for region
- BAMC has .75 Glaucoma Coverage
  - 1 doc is also 286<sup>th</sup> asst Commander, asst Chief of Service, OIC of Humanitarian Missions
- WHMC has .50 Glaucoma Coverage
  - 1 doc is Chief of Department, Air Force Consultant
- Shortage for combined program: .75





# Staff Providers

## **Cornea/Refractive Surgery Path/Neuro-Oph**

### *Background*

- Adequately covered
- Path specialist is spread thin between 3 programs (BAMC, WHMC, UTSA)



# Admin Support

- Situation:
  - Surgery Database
  - WinCis
  - CHCS II
  - Coding processing
- *Recommendation:*
  - Admin Clerk (**already developed**)
  - Increase tech support (see prior slide)
  - All high volume Outpatient surgery be give **right to use preprinted order sets, consents, and discharge instructions** to optimize provider time and increased # of pts seen



# Space

- Situation:
  - with full complement of docs, rooms bottleneck, front desk backs up
- *Recommendation:*
  - Expand front desk (**adding clerk, terminal, desk space**)
  - Complete conversion of 4 “screening rooms” to full exam lanes (**need to get equipment**)
  - Use additional lanes during high volume **days(use adjacent aisle in (2-4 lanes) and vice versa)**
  - Support equipment to make “Numbering System” similar to Pharmacy (**funding to get equipment**)



# Lane Estimates

## Background

- Estimate of pts visits per month (to include appts, walkins, inpts, in-house referrals same day...=3000 + 200+ 100 + 300) : 3600
- Lane days(15 working lanes; 4.5 days per week (academics/training/holidays= .5-1.0 day per week); 4 wks/month) : 270
- pts/lane day: 10(based on: 1 hr lunch; time for pt that includes dilation time, admin entries (labs, OR info, pt forms) hours of opn contingent on work hours of front desk from 0730-1630hrs requires last pt appt at 1530hrs)minus .. approximates 45 min/pt):
  - 10pts/lane/day
  - Lanes/day (3600pts/10pts/lane/20 day/mo) : 18
  - **Lanes short** (18-15) : 3



# Filing System

- Situation:
  - Current system is out-dated; capacity inadequate; limits one person at time to draw records; difficult to use (weight of bins)
- *Recommendation:*
  - **Acquire new system** that addresses current deficiencies



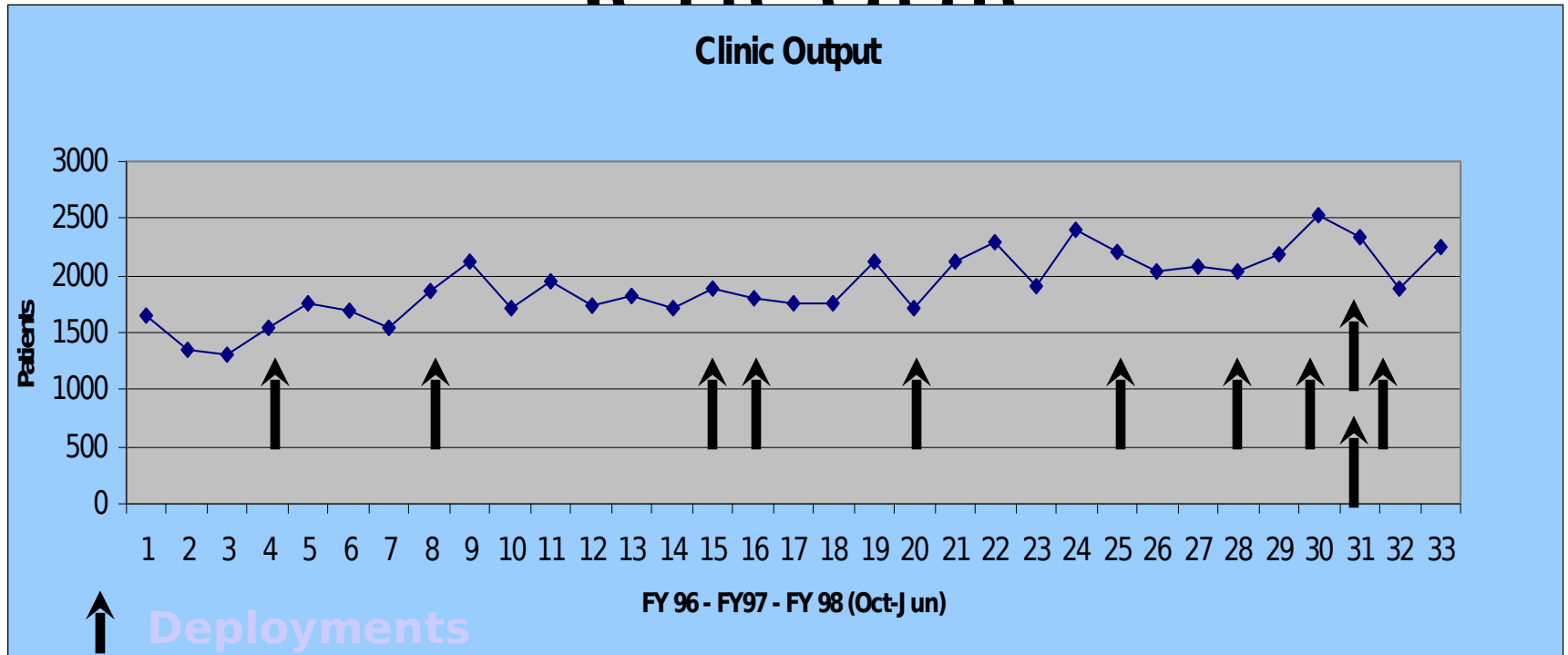
***Integrity - Service - Excellence***

# WHMC Ophthalmology TP Clinic Support

FY04 RSA	Current RSA
1.0 MD	0 MD
6 techs	4 techs
3 admin	2 admin

Reduction = Loss of MD & ancillary support for 300 patients/month

# Manpower Costs of a Busy Deployment Schedule





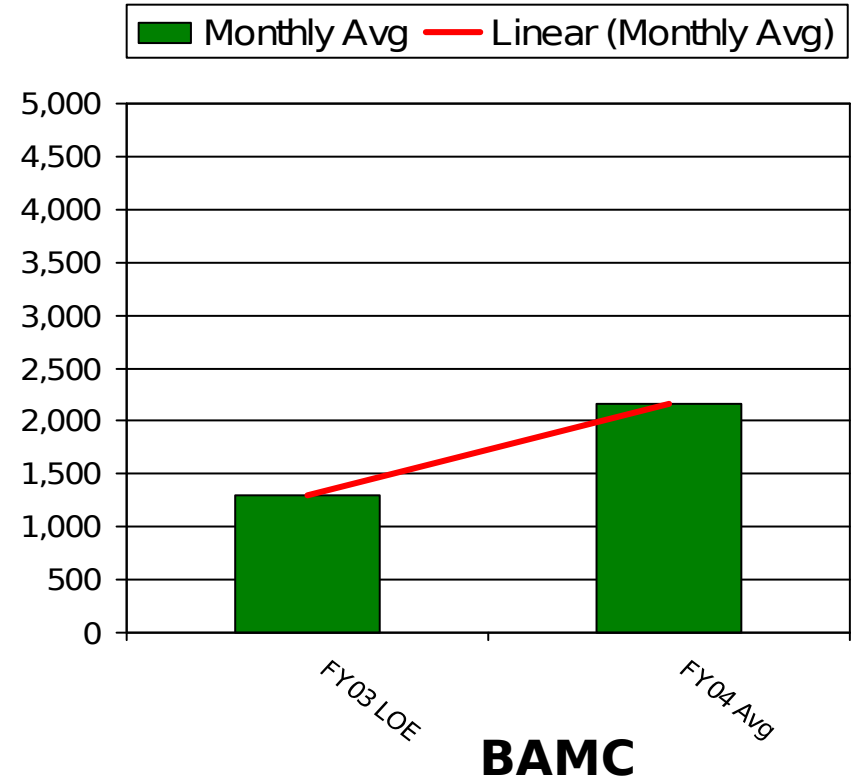
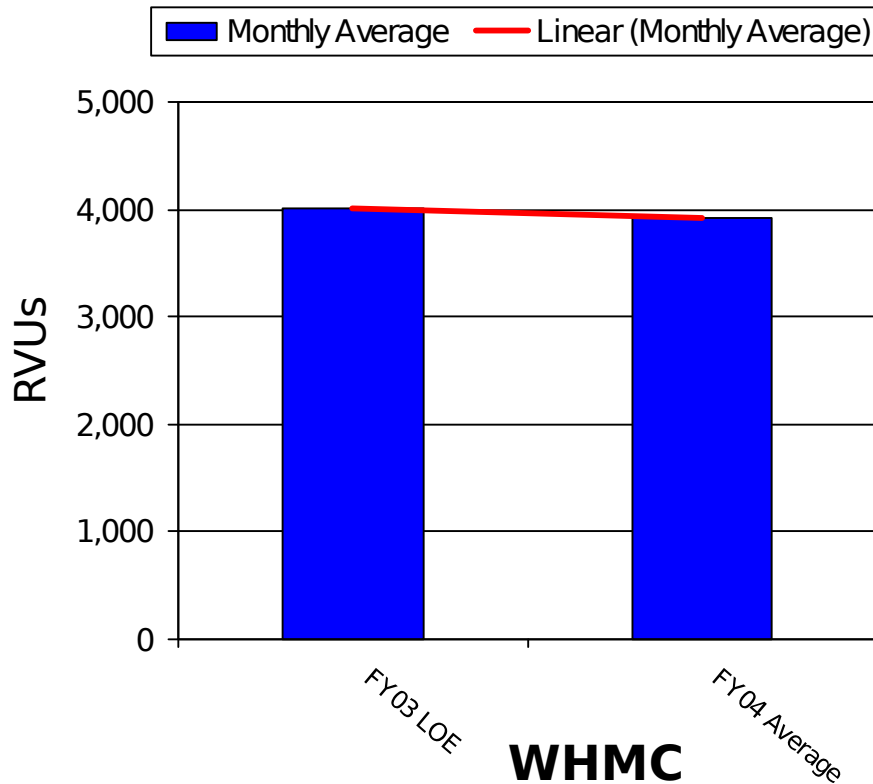
# Ophthalmology Research Collaboration

- IMITS- UPMC – local budget \$600K
  - Anticipate 5+ FTE's for clinical/research
  - Goal: compare exam with photo reading
- Texas A&M for diabetes screening – local budget \$100K
  - Anticipate part-time ophthalmologist and photographer, camera, other resources
  - Goal: compare exam with computer reading



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# Ophthalmology Business Plan Projections



- @ FY04 RVU/Visit
  - WHMC needs 2,994 visits/mo
  - BAMC needs 1,465 visits/mo